

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) In a computing system that has access to contact data stored according to a schema in a data store, the data store being in communication with applications configured to request access to schematized contact data in the data store, one or more of the applications lacking the configuration to natively access the schematized contact data, a method for simplifying access to the schematized contact data, the method comprising:

an application calling a contact data control to request a first user interface, the contact data control being external to the application;

the application receiving the first user interface from the external contact data control and displaying the first user interface;

[[an]] the application receiving at the first user interface a request to access contact data stored in a data store, wherein the data store is centralized and acting as a single data store for contact data for a plurality of applications accessing contact data, and wherein the centralized data store stores all contact data for the plurality of applications according to a single schema for which the application receiving the request lacks the configuration to natively access;

the application calling [[an]] the external contact data control to request the contact data in a non-schematized format, wherein the application calling the external contact data control includes the application requesting that the external contact data control retrieve the contact data and translate the contact data from a schematized format to the non-schematized format, and further requesting that the external contact data provide the application with authorization to access the schematized contact data, wherein the application natively lacks both the configuration and authorization to access the schematized contact data;

the application receiving the requested contact data from the external contact data control in the non-schematized format, the contact data received by the application having been converted from a corresponding schematized format by the external data contact control; [[and]]

the application calling the external contact data control to request a second user interface; and

the application receiving the second user interface from the external contact data control and causing a display device to display the contact data at the second user interface to a user of the application, the displayed contact data corresponding to the contact data received by the application in a non-schematized format and converted by the external contact data control from the schematized format, and the contact data being displayed notwithstanding that the application lacks the configuration to natively access the contact data stored in the data store according to the schema.

2. (Cancelled).
3. (Cancelled).
4. (Previously Presented) The method as recited in claim 1, wherein the act of the application calling an external contact data control comprises an act of calling a contact data control that prevents empty data fields from being presented.
5. (Previously Presented) The method as recited in claim 1, wherein the act of the application calling an external contact data control comprises an act of calling a contact data control that offers an actionable user-interface.
6. (Previously Presented) The method as recited in claim 5, further comprising:
selecting a portion of displayed contact data from the actionable user-interface to cause an action associated with an updated application to be performed.
7. (Previously Presented) The method as recited in claim 1, wherein the act of the application calling an external contact data control comprises an act of calling an external contact data control that presents tasks associated with a data field when focus is shifted to the data field.
8. (Previously Presented) The method as recited in claim 1, wherein the act of the application calling an external contact data control comprises an act of calling an external contact data control that provides a pop-up menu to manipulate contact data.

9. (Previously Presented) The method as recited in claim 1, wherein the act of the application calling an external contact data control comprises an act of calling an external contact data control that determines the size of an interface based on the user-input.

10. (Previously Presented) The method as recited in claim 1, wherein the act of the application calling an external contact data control comprises an act of calling an external contact data control that appropriately presents contact data based on a location associated with the contact data.

11. (Previously Presented) The method as recited in claim 1, wherein the act of the application calling an external contact data control comprises an act of calling an external contact data control that determines the contact data to be displayed based on user-input.

12. (Previously Presented) The method as recited in claim 11, wherein the act of calling a contact data control that determines the contact data to be displayed based on user-input comprises an act of determining the contact data to be displayed based on a presentation template.

13. (Previously Presented) The method as recited in claim 11, wherein the act of calling a contact data control that determines the contact data to be displayed based on user-input comprises an act of determining the contact data to be displayed based on a dynamically updated presentation template.

14. (Previously Presented) The method as recited in claim 11 wherein the act of the application calling an external contact data control that determines the contact data to be displayed based on user-input comprises an act calling an external contact data control that sets a default value for a multi-value set.

15. (Currently Amended) In a computing system that has access to contact data that is stored in a centralized data store according to a single schematized format for multiple applications, [[in]] the data store being in communication with applications configured to request access to schematized contact data, one or more of the applications lacking the configuration to natively access schematized contact data in the data store, a method for simplifying access to the schematized contact data, the method comprising:

receiving contact data for one or more contacts, the contact data being received by an application that lacks the configuration to natively access contact data of a schematized format,

the application calling a contact data control to request a first user interface, the contact data control being external to the application;

the application receiving the first user interface from the external contact data control and causing a display device to display to a user of the application at the first user interface at least a portion of the contact data for the one or more contacts;

the application calling the external contact data control to request a second user interface and displaying the second user interface;

the application receiving, at the application second user interface, updates to the contact data for the one or more contacts;

the application calling the external contact data control, wherein calling the external contact data control includes the application sending the updates to the contact data to the external contact data control in a non-schematized format and requesting that the external contact data control translate the contact data from the non-schematized format to a schematized format and update the contact data for the one or more contacts in a centralized data store to reflect the updates to the contact data, the centralized data store acting as a single data store for contact data for the application and one or more other applications that access the contact data, the centralized data store storing the contact information in the schematized format, and the updated contact data in the data store being stored in the schematized format such that the one or more other applications can access the updated contact data in the schematized format; and wherein the application calling the external contact data control further includes the application requesting that the external contact data control provide the application with access to update the contact data in the schematized

format, wherein the application natively lacks both the configuration and authorization to access the schematized contact data; and

using the application or the one or more other applications, accessing the updated contact data from the centralized data store and displaying the updated contact data to a user of the respective application.

16. (Cancelled).

17. (Cancelled).

18. (Previously Presented) The method as recited in claim 15, wherein the act of calling the application an external contact data control comprises an act of calling an external contact data control that checks the validity of the contact data received by the application in a non-schematized format.

19. (Cancelled).

20. (Cancelled).

21. (Currently Amended) A computing system, comprising:

- one or more processors; and
- one or more computer-readable storage media, having stored thereon:
 - a centralized data store acting as a single data store of contact data for a plurality of applications which access the contact data, wherein the centralized data store stores all contact data for the plurality of applications and according to a single schema not natively understood by one or more of the plurality of applications,
 - one or more of the plurality of applications that are not configured to natively access the schematized contact data and which are not authorized to access the schematized contact data, and
 - at least one external contact data control that can be executed by the one or more processors, the at least one external contact data control being configured to:
 - receive a request from an application that lacks the configuration to natively access the contact data stored at the centralized data store in the schematized format, the request including a request to retrieve the contact data, to translate the contact data from the schematized format to the non-schematized format, and to provide the application with authorization to access the schematized contact data;
 - provide the application with a user-interface that can receive requests, updates, and data from the user;
 - provide the application with a user-interface that can display data to the user;
 - retrieve contact data from the centralized data store and in the schematized format in response to the request;
 - convert retrieved contact data from the schematized format to a corresponding non-schematized format such that the application can present contact data to a user notwithstanding that the application lacks the configuration to access contact data directly in the schematized format; and
 - send the contact data in the non-schematized format to the application to be presented to a user.

22-27. (Cancelled).

28. (Currently Amended) A computing system, comprising:

one or more processors; and

one or more computer-readable storage media, having stored thereon:

 a centralized data store acting as a single data store of contact data for a plurality of applications which access the contact data, wherein the centralized data store stores all contact data for the plurality of applications and according to a single schema not natively understood by one or more of the plurality of applications,

 one or more of the plurality of applications lacking the configuration to natively access the schematized contact data and which are not authorized to access the schematized contact data, and

 at least one external contact data control that can be executed by the one or more processors, the at least external one contact data control being configured to:

 receive a request from an application to access contact data for one or more contacts, the contact data being stored in the centralized data store in a schematized format, and the application making the request notwithstanding the application lacking the configuration to natively access contact data in the schematized format, the request further including a request to translate convert the contact data from the schematized format to a non-schematized format, and a request to provide the application with authorization to access the schematized contact data;

provide the application with a user-interface that can receive requests, updates, and data from the user;

provide the application with a user-interface that can display data to the user;

 retrieve contact data from the centralized data store corresponding to the request from the application, the retrieved contact data being in the schematized format;

 manage access of the application to the retrieved contact data for the one or more contacts, wherein managing access includes granting the application access to only limited portions of contact data for one or more contacts;

convert the limited portions of the contact data in the schematized format to the non-schematized format;

determine that some fields in the limited portions of the contact data have a null value;

suppress the fields having a null value and provide the remaining fields of the contact data to the application in the non-schematized format;

receive updated contact data in the non-schematized format from the application;

convert the updated contact data from the non-schematized format to a corresponding schematized format that conforms with the contact data schema of the centralized data source, thereby allowing the application to update contact data in the schematized format notwithstanding that the application lacks the configuration to natively access the contact data stored in the schematized format; and

store corresponding contact data in the centralized data store and in the schematized format such that other applications can access the stored contact data in accordance with the contact data schema.

29. (Previously Presented) The system as recited in claim 28, wherein the external contact data control is configured to convert the contact data from the non-schematized format to a corresponding schematized format by calling a parser that parses the contact data of the non-schematized format such that the non-schematized contact data can be made to conform with the contact data schema.

30. (Previously Presented) The system as recited in claim 28, wherein the external contact data control is configured to convert the contact data from the non-schematized format to a corresponding schematized format by checking the validity of received contact data of the non-schematized format.

31. (Previously Presented) A method as recited in claim 1, further comprising:
receiving user selection of a limited portion of the displayed contact data, and the application automatically initiating communication with the contact by the mere selection of the limited portion of the contact data.
32. (Previously Presented) A method as recited in claim 15, further comprising:
the external contact data control determining that the accessed contact data includes international contact information relative to the user; and
the external contact data control determining how the international contact data is to be formatted for an international location and re-ordering the contact data according to a suitable format for the international location.
33. (Previously Presented) A method as recited in claim 32, wherein the external contact data control accesses an external repository to determine a standard formatting for the international location.
34. (Previously Presented) A method as recited in claim 32, wherein the external contact data control accesses a presentation template for displaying contact data according to the suitable formatting for the international location.
35. (Previously Presented) A method as recited in claim 34, wherein the presentation template is defined by the user's presentation preferences.
36. (Previously Presented) A method as recited in claim 1, wherein the single data store stores contact information for a plurality of contacts, and wherein each contact has a single set of contact data merged from a plurality of applications and stored in the schematized format.